UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------------------------------|-------------------------|---------------------|------------------|
| 10/719,071 | 11/20/2003 | James Chien-Chiung Chen | TUC920030132US1 | 2276 |
| | 7590 10/09/200 YNES & VICTOR, LL | EXAMINER | | |
| ATTN: IBM37 | EVERLY DRIVE, SUI | LIN, KENNY S | | |
| BEVERLY HIL | * | 112 210 | ART UNIT | PAPER NUMBER |
| | | | 2452 | |
| | | | | |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 10/09/2008 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

krvuspto@ipmatters.com

| | | Applica | Application No. | | Applicant(s) | | | |
|--|---|------------------------|------------------|----------------------------|--------------|--|--|--|
| | | 10/719 | ,071 | CHEN ET AL. | | | | |
| Office Action Summary | | | ier | Art Unit | | | | |
| | | KENNY | S. LIN | 2152 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | | |
| Status | | | | | | | | |
| | Responsive to communication(s) file | ad on 08 July 2008 | | | | | | |
| - | • | 2b)∏ This action is | : non-final | | | | | |
| 3)□ | | <i>′</i> — | | tters prosecution as to th | e merits is | | | |
| ٥/ك | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposit | on of Claims | | | | | | | |
| 4)⊠ | Claim(s) <u>1-8 and 10</u> is/are pending i | in the application. | | | | | | |
| <i>,</i> — | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| | 5) Claim(s) is/are allowed. | | | | | | | |
| ′= | Claim(s) <u>1-8 and 10</u> is/are rejected. | | | | | | | |
| 7) | Claim(s) is/are objected to. | | | | | | | |
| | Claim(s) are subject to restrict | ction and/or election | requirement. | | | | | |
| | ion Papers | | · | | | | | |
| | The specification is objected to by th | e Evaminer | | | | | | |
| • — | • | | h)□ objected to | hy the Examiner | | | | |
| 10/ | 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| ,— | ınder 35 U.S.C. § 119 | , | | | | | | |
| | - | for foreign priority | under 25 II S.C. | \$ 110(a) (d) or (f) | | | | |
| | Acknowledgment is made of a claim | ior loreign priority t | inder 35 U.S.C. | § 119(a)-(u) or (i). | | | | |
| a) | a) All b) Some * c) None of: | | | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | | |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| Coo the attached detailed office action for a list of the certified copies not received. | | | | | | | | |
| | | | | | | | | |
| Attachmen | ` ' | | 4) [] laren ! | . C | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date | | | | | | | | |
| 3) 🔯 Infor | 3) 🔯 Information Disclosure Statement(s) (PTO/SB/08) 5) 🔲 Notice of Informal Patent Application | | | | | | | |
| Paper No(s)/Mail Date <u>7/8/2008</u> . 6) Other: | | | | | | | | |

Application/Control Number: 10/719,071 Page 2

Art Unit: 2152

DETAILED ACTION

1. Claims 1-8 and 10 are presented for examination. Claims 9 and 11-30 are canceled.

2. The IDS submitted on 7/8/2008 is considered.

Response to Arguments

3. Applicant's arguments with respect to claims 1-8 and 10 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

4. Claim 7 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 7 contain the same limitation already claimed in claim 6.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over West et al (West), US6,912,629, in view of Brown et al (Brown), US 7,107,316.

- 7. West was cited in the previous office action.
- 8. As per claims 1, West taught the claimed invention including a method for assigning priorities, comprising:
 - a. Under control of a primary control unit,
 - i. Receiving a request to manipulate data (col.4, lines 40-43, col.6, lines 50-55);
 - ii. Determining a type of the request, wherein the type of the request includes a synchronous copy command, an asynchronous copy command, and an establish with copy command (col.1, lines 54-67, col.2, lines 1-34); and
 - iii. Sending a command to a secondary control unit, wherein the command includes the request, wherein the primary control unit and the secondary control unit allocate resources to handle the request (col.4, lines 40-43, col.5, lines 25-30, 36-39,).
- 9. West did not specifically teach to assign a priority to the request based on the type of the request and to handle the request based on the assigned priority. Brown taught to assign priorities to the messages based on the type of request message and to handle the request based on the assigned priority (abstract, col.2, lines 43-58, col.9, lines 19-33). It would have been

Art Unit: 2152

obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of West and Brown because Brown's teaching and suggestion of assigning priority according to various attribute of the request enables West's method to manage the order of processing for incoming requests.

Page 4

- 10. As per claim 10, West and Brown taught the claimed invention as claimed in claim 1. Brown further taught that at the secondary control unit, using the priority assigned to the request to process the request (col.2, lines 43-58, col.9, lines 19-33).
- 11. As per claims 2-5, West and Brown taught the invention substantially as claimed in claims 1. West further taught that the request is issued with synchronous PPRC command, asynchronous PPRC command, Extended Distance PPRC command (col.1, lines 54-67, col.2, lines 1-34). Brown taught to assign the requests different priorities (col.2, lines 43-58, col.9, lines 19-33). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of West and Brown and assign priorities over different types of commands including PPRC commands for processing.
- 12. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over West and Brown as applied to claim 1 above, and further in view of Meaney et al (Meaney), US 5,564,062.
- 13. Meaney was cited in the previous office action.

Application/Control Number: 10/719,071

14. As per claims 6-8, West and Brown taught the invention substantially as claimed in claims 1. West further taught that the request is issued with a synchronous Peer-to-Peer Remote Copy command (col.1, lines 54-67). Brown further disclosed to receive a host priority with the request; and mapping the host priority to a priority in high priority range having multiple priority values based on the host priority (col.9, lines 24-67, col.10, lines 1-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of West and Brown and assign priorities over different types of commands including PPRC commands for processing. West and Brown did not specifically teach to map the host priority based on one of pending I/O requests and available resources. Meaney taught to assign and update priority based on pending I/O request and resource availability (abstract, col.2, lines 5-29). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of West, Brown and Meaney because Meaney's teaching of checking the availability of resource enables West and Brown's method to avoid resource conflict and assign priority to requests accordingly.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Application/Control Number: 10/719,071 Page 6

Art Unit: 2152

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

16. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number

for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kenny S Lin/

Primary Examiner, Art Unit 2152

October 10, 2008